

XP-00228863

AN - 1997-468159 [43]

AP - JP19960023859 19960209

CPY - SUME

DC - A85 L03 X16

FS - CPI;EPI

IC - H01M2/16

MC - A04-E08 A04-G01E A12-E06B L03-E01A

- X16-B01F1 X16-F02

PA - (SUME) SUMITOMO ELECTRIC IND CO

PN - JP9219185 A 19970819 DW199743 H01M2/16 006pp

PR - JP19960023859 19960209

XA - C1997-148760

XIC - H01M-002/16

XP - N1997-390556

AB - J09219185 The diaphragm comprises a porous resin film (1), comprising polytetrafluoroethylene, on the surface of which a porous resin particle aggregate layer (3) is formed. The layer comprises multiple resin fine particles (2) for shut down, which comprise an ethylene copolymer and which have a low m. pt., greater than 10 deg. C. The resin particles are fused and fixed onto the surface of the porous resin film at a time when short circuit is generated in the battery.

- USE - Used in e.g. lithium secondary batteries used in portable electronic devices.
- ADVANTAGE - The generation of an inner short circuit at the positive electrode is prevented. The life time of the battery is prolonged. The discharge capacity is improved. The battery can be used in a low temperature environment.

- (Dwg.1/1)

IW - SEPARATE NON AQUEOUS ELECTROLYTIC SECONDARY BATTERY COMPRISE RESIN PARTICLE RESIN PARTICLE AGGREGATE LAYER FUSE FIX SURFACE POROUS RESIN FILM TIME SHORT CIRCUIT GENERATE BATTERY

IKW - SEPARATE NON AQUEOUS ELECTROLYTIC SECONDARY BATTERY COMPRISE RESIN PARTICLE RESIN PARTICLE AGGREGATE LAYER FUSE FIX SURFACE POROUS RESIN FILM TIME SHORT CIRCUIT GENERATE BATTERY

NC - 001

OPD - 1996-02-09

ORD - 1997-08-19

PAW - (SUME) SUMITOMO ELECTRIC IND CO

Tl - Separator for non-aqueous electrolytic secondary battery - comprises resin particles of resin particle aggregate layer which fuse and fix onto surface of porous resin film at time when short circuit is generated in battery

A01 - [001] 018 ; R00975 G0022 D01 D12 D10 D51 D53 D59 D69 D82 F- 7A ;
H0000 ; S9999 S1285-R ; P0511 ;

- [002] 018 ; K9574 K9483 ; N9999 N7147 N7034 N7023 ; B9999 B5221
B4740 ; Q9999 Q7341 Q7330 ; K9665 ; ND01 ;

- [003] 018 ; B9999 B5447 B5414 B5403 B5276 ; N9999 N7090 N7034 N7023 ;

A02 - [001] 018 ; R00326 G0044 G0033 G0022 D01 D02 D12 D10 D51 D53 D58 D82 ;
H0011-R ; S9999 S1456-R ; P1150 ;

- [002] 018 ; K9574 K9483 ; N9999 N7147 N7034 N7023 ; B9999 B5221
B4740 ; Q9999 Q7341 Q7330 ; K9665 ; ND01 ;

- [003] 018 ; B9999 B5607 B5572 ; B9999 B5209 B5185 B4740 ;

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